CORNU CUTANEUM OF THE HUMAN SCALP.

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ONE of the rarest and most curious classes of tumors to which the human organism is subject, is horns, especially multiple horns, of the scalp. In ancient times, when idolatry and superstition reigned supreme, these growths were considered symbolic of wisdom and power. In Michael Angelo's painting of Moses, two horns adorn (?) the patriarch's head. This single fact would indicate the infrequency of the anomaly even in ancient times.

Horns of the human scalp are usually single; they differ from those in animals by being non-uniform in size, shape, etc. No part of the human body is exempt from their invasion, but in perhaps half of the cases they involve the scalp. In reviewing the available literature we did not find more than two cases in which two or more separate horns appeared at the same time in an individual scalp. In no instance did we find a case in which two separate horns of the scalp were associated with a cutaneous cancer of the nose, and in which numerous sebaceous cysts of the scalp were also present, as occurred in our case.

Bland-Sutton describes (1) sebaceous horns, (2) warty horns, (3) cicatrix horns, and (4) nail horns. He regards them of not infrequent occurrence, although Crocker contends that they are very rare. In Robert's interesting case the horn grew from a wart on the cheek of a woman seventy-five years of age, while that reported by McLeod developed from the base of a wart on the chest and attained a length of two inches.

Shaw saw a patient fifty-six years of age with a cutaneous horn of the lower eyelid. Six years previous to its appearance he observed a small pimple upon the lid. A fine, hard, hair-like growth appeared on the surface and gradually assumed the appearance of a horn; eighteen months later it dropped off, leaving a pimple the same as before; later the horny growth returned and became two inches long. Whishow's patient possessed a horn which developed from a tubercle in the scalp. It attained a length of two inches. In Bellamy's patient the horn grew from the clitoris and resembled the claw of a lion. The largest horn that has been found in a human was that of Paul Rodreguez; it grew upon the side of the patient's head, and was fourteen inches in circumference, and was divided at the apex into three shafts. In the museum of the Medical Department of Washington University is a cast of a cutaneous horn of the scalp. The horn was six inches in length and grew from the forehead. The cast was brought from Paris by Dr. Pope. In Soubervielle's patient the horn was ten inches long.

Cutaneous horns have been found in mice, birds, and other members of the lower animals in which horns are uncommon. Bland-Sutton has presented a sketch of a cutaneous horn in a mouse found in Westminster Abbey. Sutton has also referred to a very interesting case of horn which grew from a scar resulting from a burn. The latter is especially interesting since Spietschka has contended that no true horn can be formed if there be no papillæ in that part of the skin.

Etiology.—It is quite certain that the true etiology depends on several factors. Most authorities are non-committal. The predisposing factor seems to be a wart, a sebaceous cyst, a scar, or a nail. The exciting factor may be a blow or anything that causes certain changes in the sac-tissue whereby horny cells are constantly produced. At any rate, we do not agree with Bland-Sutton, who holds that sebaceous horns are formed in consequence of the protrusion of the contents of a sebaceous cyst through a rupture in the cyst wall, or through

the duct of the follicle, which becomes desiccated on exposure to the air. Gross is of the opinion that horns are directly traceable to chronic inflammation, such as produced by blows, burns, etc. Lall's very interesting case adds weight to our contention. The patient, a middle-aged man, had noticed a small, hard, painless mass upon his left cheek near the angle of the mouth, eight years previous to consulting Lall; the tumor gradually enlarged and the patient consulted a barber who applied medicine; a few days later the skin over the tumor peeled off, and a small, white horn was noticed; the horn became larger and attained a length of almost three inches; the barber cut off the horn but the latter returned rapidly and in a short time was three inches long; Lall was then consulted. He found that the base of the horn involved the entire thickness of the cheek. In our case there was a history of heredity.

Pathology.—Crocker and others maintain that horns are essentially overgrown warts and that they always begin in the rete mucosum or the homologue of it lining the glands and follicles. There is always hypertrophy of the papillæ, and upon these the horn is built up, being composed of columns of epidermic horny cells, generally without nuclei. Rokitansky regards these growths to be in their nature innocent, although Paget believed that there was some relation between horns and epithelial cancer. He referred to a case of soot-cancer in which the borders of the ulcer showed spur-shaped sharp-pointed processes which he believed to be cancerous papillae. observed a patient who possessed a horn almost five inches in diameter at the base, and about four inches in length, in which the tissues at the base of the horn became ulcerated, and carcinoma developed. The daughter of Durken's patient possessed a cutaneous horn in a similar location and with the same results. Gould refers to a patient who presented a horn growing upon an epitheliomatous penis, while Pancoast observed a papillary epithelial cancer which developed at the base of horns on the face of a sea captain.

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It seems quite probable that the constant irritation naturally resulting from the presence of a cutaneous horn of the scalp, etc, prepares the tissues at the base of the horn for carcinomatous invasion.

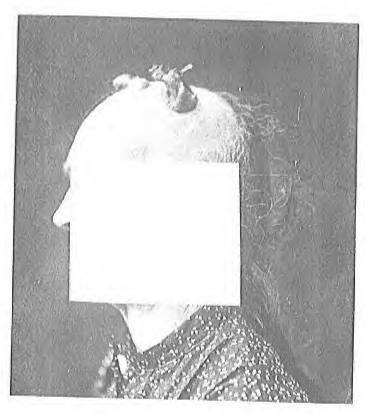
CASE.—Mrs. K——, aged 62, married, was admitted to the surgical service of the Evangelical Deaconess Hospital and gave the following history:

Family History.—Parents died of causes unknown to patient. No history of tuberculous or malignant disease in family. Mother of patient had sebaceous cysts of scalp. One sister had sebaceous cysts of scalp. Two daughters and one son of patient had similar growths. Patient is the mother of four apparently healthy children.

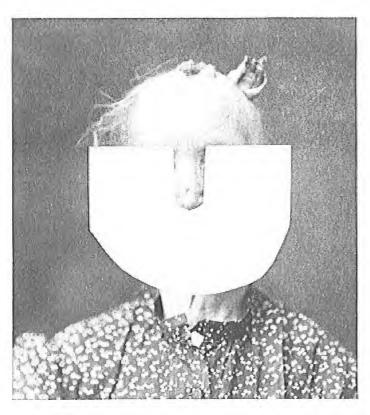
Previous History.—Always enjoyed good health. Twenty years ago she noticed several "lumps" in her scalp but since they caused her no discomfort and no inconvenience she gave them but passing thought. Seven years ago a small warty growth appeared upon the nose. She consulted a dermatologist, who removed it by means of an electric needle. The dermatologist suspected the growth to be a cutaneous cancer. One year after the removal of the growth, the grand-daughter accidentally scratched the area formerly occupied by the latter, thereby causing the parts to bleed. Since that time the patient has been troubled with a condition quite similar to that previous to the operation. Six years ago the patient fell downstairs striking and rupturing one of the sebaceous cysts; the latter discharged a corn-meal-like substance. Five years thereafter she noticed the presence of a hard, horny-like growth in two of the cysts. The growth in the ruptured cyst was the larger of the two. During the following few weeks she observed an offensive discharge from the base of one of the horny growths. The horns have been constantly increasing in size.

Present Trouble.—Patient comes to hospital to have growths removed, since they cause her annoyance and discomfort. They also cause her mental discomfort.

Physical Examination.—Medium-sized female; fairly well nourished; color good; pupils equal and react normally. A scaly growth, evidently a cutaneous cancer, is present upon the right



Cornu cutaneum in human scalp.



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side of nose; upon the left parietal area of the scalp, just below the sagittal suture and near the coronal suture, are two horns, the larger of which is anterior; both horns are somewhat curved and have a peculiar appearance. The skin about the base of the horns has the general appearance of that observed at the base of horns in the lower animals. Three irregular and separate masses, evidently sebaceous cysts, are noted in other parts of the scalp. The general findings are of no interest. Palpation reveals the fact that the horns are superficial to the aponeurosis; movement of the growths cause the patient pain. The three masses described above are sebaceous cysts. The growth on the patient's nose is evidently superficial cancer. Further examination reveals nothing worthy of special mention.

Treatment.—The treatment of horns is simple excision. It is needless to say that complete excision of the base of the growth prevents recurrence. In our patient, the two horns were completely excised under local anæsthesia. One of the sebaceous cysts was also removed. The patient refused to permit removal of remaining cysts. Dr. Fisch examined the contents of the cyst removed. The rarity and uniqueness of the case in general have caused us to present this report.

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